



HERST & ASSOCIATES, INC.

**Global Presence
Personal Attention**

MEMORANDUM

To: Mike Hockley
Copy to: Doug Borro
From: Ward Herst
Date: May 3, 2002
Subject: Private Wells Near Bridgeton Landfill



In Mimi Garstang's recent denial letter for the preliminary site inspection (PSI) for the Bridgeton Landfill Expansion, she used as partial justification the fact that an electronic database at the Geologic Survey and Resource Assessment Division (GSRAD) listed a recently-installed private well in the Missouri River alluvium. Ms. Garstang went on to say that recent installation of a well into the alluvium indicated that the alluvium continues to be used as a source of water in the area.

Ms. Garstang's letter was ambiguous regarding the location and use of the recently-installed well, as well as the database that she referenced when make her determination. As part of developing responses to Ms. Garstang's comments, Herst & Associates, Inc. contacted the GSRAD and requested a listing of private wells installed within the last 10 years that are located within 3 miles of the Bridgeton Landfill from the GSRAD database. The RI Report for both OU-1 and OU-2 discussed the lack of wells near the landfill up through 1995 to 1997. The GSRAD database therefore included more recent information.

The attached Table 1 and Figure 1 identify the information provided by the GSRAD. The GSRAD provided a listing of fourteen private wells in the general area, at distances up to about 7 miles from the landfill. To facilitate evaluation, Herst & Associates, Inc. numbered each of the fourteen wells. There are three key points that must be recognized, (1) alluvium underlies the western portion of the Bridgeton Landfill, and rock underlies the eastern portion, (2) the regional groundwater flow direction is northwesterly toward the Missouri River, and (3) the Missouri River is a groundwater discharge zone.

Based on the information included in the GSRAD database, there are no private wells downgradient of the Bridgeton Landfill. Six of the fourteen wells in the GSRAD database are installed across the Missouri River from the landfill, and therefore are hydraulically isolated from the Bridgeton Landfill area by the Missouri River. Four of the wells are located south to southwest of the Bridgeton Landfill, in areas that are either upgradient or cross-gradient to the landfill, and are at least two miles away from the landfill. The closest well to the landfill, identified as Well #3 on Table 1 and Figure 1, is about 1.5 miles upgradient to cross-gradient of the landfill, and was drilled in rock at a depth of 245 feet below ground surface. Ms. Garstang's comments focused on alluvium concerns, which would not include this upgradient to cross-gradient well location. The remaining three wells are located at distances of about 3 to 7 miles northeast of the landfill, cross-gradient of the landfill.

Ms. Garstang's letter specifically referenced a recently-installed alluvial well. The GSRAD database includes two private wells installed in 2000. They are identified as Well #7 and Well #9 on Table 1 and Figure 1. Well #7 is located approximately 4 miles northwest of the landfill, across the Missouri River. It is therefore hydraulically isolated from the Bridgeton Landfill. Well #9 is located about 2.5 miles south of the landfill, in an upgradient to cross-gradient location.

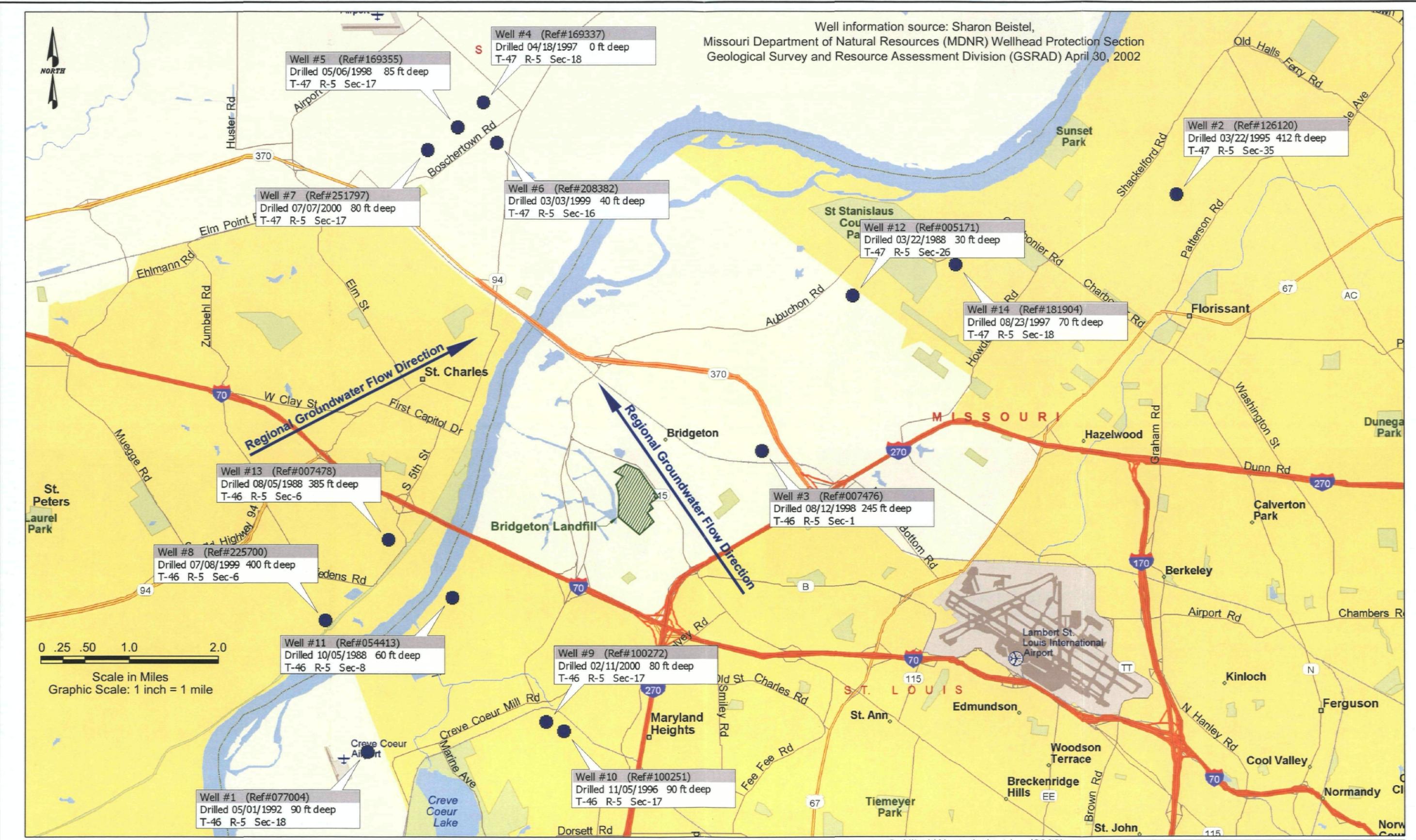
In summary, based upon the information provided by the GSRAD, which presumably mimics the information available to Ms. Garstang when she developed her comments, there are no private wells in the alluvium downgradient of the Bridgeton Landfill.

Table 1**Private Wells in Vicinity of Bridgeton Landfill**

Source: Sharon Beistel, Missouri Department of Natural Resources (MDNR)-Wellhead Protection Section
Geological Survey and Resource Assessment Division (GSRAD), April 30, 2002

Well Number (see Figure 1)	Well Permit Reference Number (per MDNR)	Well Use	Section-Township-Range	Date Drilled	Total Depth (in feet)
Well # 1	077044	Irrigation	NW SW SW SE Section 18 T46N R5E	05/01/1992	90
Well # 2	126120	Domestic	Section 35 T47N R5E	03/22/1995	412
Well # 3	007476	Business	NE SE SE NE Section 1 T46N R5E	08/12/1988	245
Well # 4	169337	Irrigation	Section 18 T47N R5E	04/18/1997	37
Well # 5	169355	Irrigation	SE NW SW Section 17 T47N R5E	05/06/1998	85
Well # 6	208382	Domestic	NW SW SW Section 16 T47N R5E	03/03/1999	40
Well # 7	251797	Water supply	SW NW SE Section 17 T47N R5E	07/07/2000	80
Well # 8	225700	Domestic	SE SE SE Section 6 T46N R5E	07/08/1999	400
Well # 9	100272	Irrigation	Section 17 T46N R5E	02/11/2000	80
Well # 10	100251	Irrigation	NE NW SE Section 17 T46N R5E	11/05/1996	90
Well # 11	054413	Irrigation	NE NE SW NW Section 8 T46N R5E	10/05/1988	60
Well # 12	005171	Domestic	NW NW Section 26 T47N R5E	03/22/1988	30
Well # 13	007478	Domestic	NW NE Section 6 T46N R5E	08/05/1988	385
Well # 14	181904	Domestic	Section 18 T47N R5E	08/23/1997	70

Well information source: Sharon Beistel,
Missouri Department of Natural Resources (MDNR) Wellhead Protection Section
Geological Survey and Resource Assessment Division (GSRAD) April 30, 2002



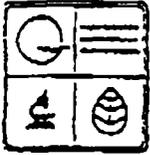
0 .25 .50 1.0 2.0
Scale in Miles
Graphic Scale: 1 inch = 1 mile

5988 Mid Rivers Mall Drive
St. Charles, Missouri 63304
Phone (636) 939-9111
Fax (636) 939-9757
HERST & ASSOCIATES, INC.

Bridgeton Landfill Bridgeton, Missouri

© Allied Waste Industries (2002)

Figure 1
Private Well
Location Map



MISSOURI DEPARTMENT OF NATURAL RESOURCES
FAX Transmittal Cover Sheet

Date of Fax: 4-30-02

<input type="checkbox"/>	URGENT
<input type="checkbox"/>	Priority
<input type="checkbox"/>	Routine
<input type="checkbox"/>	As Requested
<input type="checkbox"/>	FYI

To: Dana Rosenberg

From: SHARON BEISTEL

DNR/DGLS

FAX: 636-939-9757 Phone: _____

FAX: 573-368-2317 Phone: 573-368-2168

SUBJECT: _____

COMMENTS: copies of records for well search - most do
have directions or maps - hope this helps

RESPONSE EXPECTED: _____

Total # of pages sent (including transmittal sheet): 14

If problems with FAX call: _____



MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND LAND SURVEY

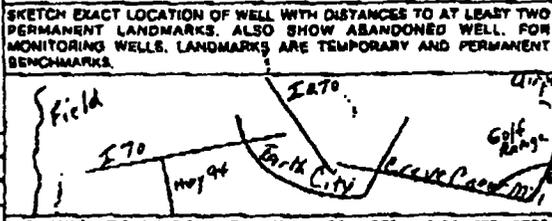
**WATER WELL RECORD
AND
PUMP INFORMATION RECORD**

(PLEASE PRINT CLEARLY)

DO NOT FILL IN		DATE RECEIVED
WELL NO. 77004	CHECK NO. 11432	MAIL
OWNER REFERENCE NO.	STATE WELL NUMBER A34585	DATE ENTERED 1980
DATE ENTERED	DATE APPROVED	DATE APPROVED

OWNER NAME Durrell Thies (Thies Farm Greenhouse)		PHONE NO. 426-6869	
ADDRESS 4215 North Hanley Rd.	CITY St. Louis	STATE Mo.	ZIP CODE 63121
OWNER STATUS <input type="checkbox"/> BUILDING CONTRACTOR <input type="checkbox"/> PRIVATE HOME OWNER		<input type="checkbox"/> DEVELOPER <input checked="" type="checkbox"/> OTHER (SPECIFY) TRACTOR <input type="checkbox"/> BUILDER	
DRILLING CONTRACTOR NAME St. Charles Drilling Co.		PUMP CONTRACTOR NAME	
DRILLING EQUIPMENT <input checked="" type="checkbox"/> MUD ROTARY <input type="checkbox"/> CABLE TOOL		<input type="checkbox"/> REVERSE ROTARY <input type="checkbox"/> AUGER (TYPE) <input type="checkbox"/> AIR ROTARY <input type="checkbox"/> OTHER (SPECIFY)	
CASING DETAILS LENGTH 82 (FEET) DIA. (IN.) 6.5/8	DEPTH OF DRILL HOLE 12"	JOINTS: <input type="checkbox"/> THREADED <input checked="" type="checkbox"/> WELDED	DRIVE SHOES: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
PACKER INFORMATION USED ON CASING: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		PACKER DEPTH (FT.) N/A	
CASING GRADING DETAILS TYPE OF SEAL: <input type="checkbox"/> FULL LENGTH <input type="checkbox"/> TOP <input type="checkbox"/> BOTTOM	MATERIAL USED <input type="checkbox"/> NEAT CEMENT <input checked="" type="checkbox"/> BENTONITE <input type="checkbox"/> CUTTINGS <input type="checkbox"/> OTHER	DEPTH OF SEAL TOP _____ BOTTOM _____	SACKS OF CEMENT OR BENTONITE USED TOP _____ BOTTOM _____ FULL LENGTH 6
LINER DETAILS LENGTH _____ DIA. (IN.) _____	WEIGHT OF LINER NO. _____	DEPTH FROM LAND SURFACE _____	JOINTS: <input type="checkbox"/> THREADED <input type="checkbox"/> WELDED <input type="checkbox"/> GLUED
LINER GRADING DETAILS TYPE OF SEAL: <input type="checkbox"/> FULL LENGTH <input type="checkbox"/> TOP <input type="checkbox"/> BOTTOM	MATERIAL USED <input type="checkbox"/> NEAT CEMENT <input type="checkbox"/> BENTONITE <input type="checkbox"/> OTHER	DEPTH OF SEAL TOP _____ BOTTOM _____	SACKS OF CEMENT OR BENTONITE USED TOP _____ BOTTOM _____ FULL LENGTH _____
SCREEN DETAILS MAKE OR TYPE DOERT	LENGTH (IN.) 8	SLOT SIZE 2/32"	DIA. (IN.) 6 5/8"
YIELD TEST <input type="checkbox"/> BALED <input type="checkbox"/> PUMPED <input checked="" type="checkbox"/> COMPRESSED AIR	HOURS 1/2	YIELD (GPM) 200	WELL DISCONNECTED AFTER DRILLING? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
WATER LEVEL MEASURED FROM LAND SURFACE (STAT. FT.) 20	DRY DOWN OR PUMPING LEVEL DURING YIELD TEST _____ FT. AFTER _____ HOURS	ABANDONED WELL <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	IS THERE AN ABANDONED WELL? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
COMPLETION DATA PUMP CAPACITY 80 GPM 3 HP SETTING 7 STAGES AT 78 FT.	MAKE OF PUMP SC-118 TYPE OF DROP PIPE <input checked="" type="checkbox"/> PLASTIC <input type="checkbox"/> GALVANIZED	WELL DISCONNECTED AFTER SETTING PUMP? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	PUMP SET BY: <input type="checkbox"/> PUMP INSTALLER <input type="checkbox"/> OWNER <input checked="" type="checkbox"/> DRILLER NOT TO BE INSTALLED UNTIL _____

DEPTH FROM LAND SURFACE	FORMATION DESCRIPTION	DIA. OF DRILL HOLE	LOCATION OF WELL SHOW LOCATION IN SECTION PLAT.	AREA NO. 41
FEET TO FEET			NW SW SE	COUNTY St. Louis
0 70	Clay-Sand	12"		SURFACE ELEVATION 450
70 90	Gravel	12"		TWN 46N N. AND 5E E OR W
				TOTAL DEPTH OF WELL 90



IF YIELD WAS TESTED AT DIFFERENT DEPTHS DURING DRILLING, LIST BELOW.

FEET	GALLONS PER MINUTE
70 - 90	200

NOTES: WELLS AND DIRECTION - DISTANCE TO CREWS COEUR
170 E. to Earth City. TR South to Crews Coeur Hill Rd. TR follow back to airport. Just before Airport.

I HEREBY CERTIFY THAT THE WELL HEREIN DESCRIBED WAS CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS FOR THE CONSTRUCTION OF WATER SUPPLY WELLS AND/OR MONITORING WELLS.

SIGNATURE (WELL DRILLER) **Carl Miller** DATE **1/15/82**
SIGNATURE (PUMP INSTALLER) _____
PERMIT NO. (WELL DRILLER) **700134** PERMIT NO. (PUMP INSTALLER) _____

PROPOSED USE OF WELL <input type="checkbox"/> DOMESTIC (1 TO 3 CONNECTIONS) <input type="checkbox"/> PUBLIC WATER SUPPLY <input type="checkbox"/> HEAT PUMP <input type="checkbox"/> OTHER (SPECIFY) _____	<input type="checkbox"/> MULTIPLE FAMILY <input type="checkbox"/> NON-COMMUNITY <input checked="" type="checkbox"/> IRRIGATION <input type="checkbox"/> MONITORING	WELL POINT NUMBER	WASTE MANAGEMENT (EPA ID-NO)
SIGNATURE (WELL OWNER) _____ DATE _____	MEAN SEA LEVEL ELEVATION OF WELL _____	WELL TYPE <input type="checkbox"/> RCRA <input type="checkbox"/> S/D/SP/IND	

CREWS COEUR



MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND LAND SURVEY
WATER WELL CERTIFICATION AND PUMP INFORMATION RECORD

OFFICE USE ONLY		DATE RECEIVED RECEIVED MAR 21
REF. NO. 126120	CHECK NO. 53837	
ROUTE P.O. Box	TRANSMITTAL NO. 275986	
STATE WELL NUMBER A607M	CROSS REFERENCE NO.	
CHECKED BY MS	ENTERED	
APPROVED BY	DATE APPROVED	

INFORMATION SUPPLIED BY OWNER

NAME Tom Lanzer		TELEPHONE	
ADDRESS 714 Moundale Dr	CITY Ferguson	STATE MO	ZIP CODE 63115
ADDRESS OF WELL SITE (IF DIFFERENT THAN ABOVE)		STATE	ZIP CODE

OWNER STATUS
 PRIVATE HOME OWNER
 BUILDER
 DEVELOPER
 OTHER (SPECIFY) _____

PROPOSED USE OF WELL
 DOMESTIC (100 GPD CONNECTIONS)
 MULTI-FAMILY
 IRRIGATION
 HEAT PUMP WATER SUPPLY
 PUBLIC WATER SUPPLY
 HEAT PUMP WATER RETURN
 OTHER _____

VARIANCE ISSUED? YES NO DATE ISSUED _____
 VARIANCE NUMBER **V**
 SIGNATURE (WELL OWNER) _____ DATE _____

INFORMATION SUPPLIED BY WELL OR PUMP INSTALLATION CONTRACTOR

LOCATION OF WELL
 SHOW LOCATION IN SECTION PLAT
 COUNTY **ST. LOUIS**
 ELEVATION _____
 AREA NO. **1A1**
 SMALLEST 1/4 **34** LARGEST 1/4 _____

SECTION THE LOCATION TO THE WELL INCLUDING MILEAGE ON ALL ROADS TRAVELLED FROM NEAREST TOWN OR HIGHWAYS


LAT. **38. 51. 21. 2** LONG. **90. 19. 23**

DESCRIBE LOCATION OF THE WELL SO WE WOULD BE ABLE TO VISIT THE WELL
NEW HARB. Ferry, South Edge schoolyard to north point
Let House on right

WELL INSTALLATION CONTRACTOR'S NAME **Imperial Drillers Co** PERMIT NUMBER **A001595wdmH**

WELL CONSTRUCTION INFORMATION

CASING DETAILS	LENGTH 109 FT.	DIAMETER OF CASING 6 1/2 IN.	WEIGHT OR SOR 13.6	DIAMETER OF DRILL HOLE 8 1/2 IN.	JOINTS <input type="checkbox"/> THREADED <input checked="" type="checkbox"/> GLUED <input type="checkbox"/> WELDED	DRIVE SHOES <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	MATERIAL <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> PLASTIC <input type="checkbox"/> CONCRETE	
CASING PACKER DETAILS	TYPE USED <input type="checkbox"/> NONE <input type="checkbox"/> RUBBER BOOT <input type="checkbox"/> COUPLING <input type="checkbox"/> INVERTED BELL		DEPTH SET FT.		DEPTH FT.	FORMATION DESCRIPTION		
CASING GROUT DETAILS	POSITION OF SEAL <input checked="" type="checkbox"/> FULL LENGTH <input type="checkbox"/> BOTTOM <input type="checkbox"/> TOP		MATERIAL <input type="checkbox"/> CEMENT SLURRY <input type="checkbox"/> BENTONITE <input checked="" type="checkbox"/> CHIPS <input type="checkbox"/> GRANULAR <input type="checkbox"/> PELLETS		DEPTH FROM THE SURFACE TO THE TOP OF THE GROUT SEAL 79 FT.		DEPTH FROM THE SURFACE TO THE BOTTOM OF THE GROUT SEAL 109 FT.	
LINER DETAILS	FUNCTION OF LINER <input type="checkbox"/> USED ONLY TO HOLD BACK THE FORMATION <input type="checkbox"/> USED TO SEAL OUT CONTAMINATION OR OTHER CONDITIONS		MEASURED DEPTH FROM THE SURFACE TO THE TOP OF THE LINER FT.		MEASURED DEPTH FROM THE SURFACE TO THE BOTTOM OF THE LINER FT.		DRILLING SUSPENDED AFTER GROUTING <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO HOURS _____	
LINER PACKER DETAILS	TYPE USED <input type="checkbox"/> NONE <input type="checkbox"/> RUBBER BOOT		PACKER 1 FT.		PACKER 2 FT.		PACKER 3 FT.	
LINER GROUT DETAILS	POSITION OF SEAL <input type="checkbox"/> FULL LENGTH <input type="checkbox"/> BOTTOM <input type="checkbox"/> TOP		MATERIAL <input type="checkbox"/> CEMENT SLURRY <input type="checkbox"/> BENTONITE <input type="checkbox"/> CHIPS <input type="checkbox"/> GRANULAR <input type="checkbox"/> PELLETS		DEPTH FROM THE SURFACE TO THE TOP OF THE GROUT SEAL FT.		DEPTH FROM THE SURFACE TO THE BOTTOM OF THE GROUT SEAL FT.	
ALLUVIAL SCREEN DETAILS	MAKE OR TYPE	SLOT SIZE	GRAVEL PACK	GRAIN SIZE	THICKNESS	FROM TO FT.	T.D 412	
YIELD TEST	<input checked="" type="checkbox"/> COMPRESSED AIR <input type="checkbox"/> BALED <input type="checkbox"/> OTHER	YIELD 15/HR	STATIC WATER LEVEL 220	FEET FROM SURFACE	DRAW DURING YIELD TEST DOWN _____ FEET AFTER _____ HOURS	ABANDONED WELL? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	WAS THE ABANDONED WELL PROPERLY SEALED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
WELL DISINFECTED AFTER DRILLING?	TYPE OF TOP CASING SEAL <input checked="" type="checkbox"/> PITLESS ADAPTOR <input type="checkbox"/> WELL SEAL <input type="checkbox"/> OTHER _____		PUMP SET BY <input checked="" type="checkbox"/> DRILLER <input type="checkbox"/> PUMP INSTALLER <input type="checkbox"/> OWNER		DATE WELL CONSTRUCTION WAS COMPLETED 3-17-95		SIGNATURE (WELL DRILLER) Donald S. G... A001595wdmH DATE 3-17-95	

INFORMATION SUPPLIED BY PUMP INSTALLATION CONTRACTOR

PUMP CONTRACTOR'S NAME **Imperial Drillers Co** PERMIT NUMBER **A001595wdmH**

COMPLETION DATA
 PUMP DETAILS **5 G.P.M. 1 HP**
 PUMP SET AT **400 FT.**
 WELL DISINFECTED AFTER SETTING PUMP YES NO

TYPE OF LINER
 PLASTIC GALVANIZED

DATE PUMP INSTALLATION WAS COMPLETED
3/22/95

SIGNATURE (PUMP INSTALLER)
Steve Young DATE **3/22/95**

3



MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND LAND SURVEY
WATER WELL RECORD

MAIL CANARY COPY TO:
WELL DRILLER'S FUND
P.O. BOX 290
ROLLA, MISSOURI 65401
ENCLOSE \$18.00 WATER WELL CERTIFICATION FEE WITHIN 60 DAYS AFTER WELL COMPLETION

DO NOT FILL IN
STATE WELL NO. 9988A05790
OTHER NO. 456141

OWNER NAME: Veterans Septic Tank Service ADDRESS: 13010 Gist, Bridgeton, Mo. 63044

DRILLING CONTRACTOR NAME: St. Charles Drilling Co. ADDRESS: 6342 Old Hwy. 94 So., St. Charles, Mo. 63303

LOCATION AND DATE: Mileage and direction from nearest town or highway: Hwy. 70 to Earth City to St. Charles DATE COMPLETED: Rock Rd. 2-12-88

PROPOSED USE OF WELL: DOMESTIC INDUSTRIAL AIR CONDITIONING TEST WELL (SEALED AFTER ABANDONED) YES NO
 BUSINESS ESTABLISHMENT FARM IRRIGATION OTHER (SPECIFY)

DRILLING EQUIPMENT: MUD ROTARY REVERSE ROTARY AIR ROTARY CABLE TOOL OTHER (SPECIFY)

CASING DETAILS: DEPTH (FT.): 30 DIAM. (IN.): 6.9 WEIGHT/FT. OR SCHEDULE: ASTM480 SPACER GUIDES USED: YES NO JOINTS: THREADED WELDED DRIVE-HOLE: Casing Shoe MATERIAL: STEEL PLASTIC OTHER PVC

GROUTING DETAILS: TYPE OF SEAL: FULL LENGTH NEAT CEMENT BENTONITE DEPTH OF SEAL: TOP BOTTOM SACKS OF CEMENT OR BENTONITE USED: TOP FULL LENGTH BOTTOM BOTTOM DRILLING SUSPENDED 72 HRS. AFTER GROUTING: YES NO

SCREEN DETAILS: MAKE: LENGTH OPEN TO AQUIFER (FT.): SLOT SIZE: DIAM. (IN.): IF GRAVEL PACKED: DIAMETER OF WELL INCLUDING GRAVEL PACK (IN.): GRAVEL SIZE (IN.) FROM (FT.): TO (FT.):

YIELD TEST: BAILED COMPRESSED AIR PUMPED HOURS: 1/2 YIELD (GPM): 30

WATER LEVEL: MEASURE FROM LAND SURFACE - STATIC (FT.): 25 DURING YIELD TEST: N/A (FEET) DEPTH OF COMPLETED WELL IN FEET BELOW GROUND SURFACE: 245

COMPLETION DATA: PUMP CAPACITY AT SETTING: 320 GPM TOH FEET TYPE OF TOP CASING SEAL: Pitless Adapter WELL DISINFECTED: AFTER DRILLING: YES NO AFTER SETTING PUMP: YES NO IS THERE AN ABANDONED WELL?: YES NO WAS IT PROPERLY SEALED?: N/A

DEPTH FROM LAND SURFACE		FORMATION DESCRIPTION	DIAM. OF DRILL HOLE	LOCATION OF WELL (SHOW LOCATION IN SECTION PLAT)
FEET	TO FEET			
0	50	Clay	8 5/8	COUNTY St. Louis NE SE SE NE
50	80	Lime	8 5/8	
80	245	Lime	6 1/8	

Sketch exact location of well with distances to at least two permanent landmarks. Also show abandoned well.

WELL SITE: HUSSMAN GIST/ROCK RD. ST. CHARLES EARTH CITY I 70 HWY. 94 S

IF YIELD WAS TESTED AT DIFFERENT DEPTHS DURING DRILLING, LIST BELOW

FEET	GALLONS PER MINUTE
240	30

I hereby certify that I directed that the well herein described be constructed in accordance with Department of Natural Resources requirements for nonpublic water supply wells.

SIGNATURE (WELL DRILLER): [Signature] DATE: 8-21-88

SIGNATURE (WELL OWNER): DATE: PERMIT NO. A00152

JERRY KEEVEN

ch# 30609



MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND LAND SURVEY
(573) 368-2165

WATER WELL CERTIFICATION AND PUMP INFORMATION RECORD

OFFICE USE ONLY		DATE RECEIVED	
REF. NO.	169337	RECEIVED APR 23 1997	
C.R. NO.	178370	CHECK NO.	30609
STATE WELL NUMBER	AL609160	TRAVELER ID NO.	84034
ENTERED	Ph 1	APPROVED BY	WOT, PCT

INFORMATION SUPPLIED BY WELL OR PUMP INSTALLATION CONTRACTOR

OWNER NAME BOB SCHRODER		TELEPHONE 314 240 4900		CASING DEPTH DETERMINED BY THE O.N.R. <input type="checkbox"/> NO <input type="checkbox"/> YES. ATTACH A COPY OF THE LETTER	
OWNER ADDRESS 809 Palm		CITY St Charles	STATE Mo	ZIP CODE 63301	
ADDRESS OF WELL SITE (IF DIFFERENT THAN ABOVE)		CITY	STATE	ZIP CODE	

PROPOSED USE OF WELL <input type="checkbox"/> DOMESTIC <input type="checkbox"/> MULTI-FAMILY <input type="checkbox"/> OPEN-LOOP HEAT PUMP WATER SUPPLY <input type="checkbox"/> OPEN-LOOP HEAT PUMP WATER RETURN <input type="checkbox"/> LIVESTOCK		<input type="checkbox"/> OTHER <input checked="" type="checkbox"/> IRRIGATION <input type="checkbox"/> NON COMMUNITY <input type="checkbox"/> PUBLIC WATER SUPPLY		ABANDONED WELL? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	WAS THE ABANDONED WELL PROPERLY SEALED? <input type="checkbox"/> YES <input type="checkbox"/> NO
INFORMATION VERIFIED BY OWNER SIGNATURE (WELL OWNER) X				DATE 4/18/97	

SKETCH THE LOCATION TO THE WELL INCLUDING MILEAGE ON ALL ROADS TRAVELED FROM NEAREST TOWNS OR HIGHWAYS		LOCATION OF WELL St. Charles		AREA 188A	
		LAT. _____		ELEV. _____	
to St. Charles 4 miles		LONG. _____		COUNTY St. Charles	
		SMALLEST _____		LARGEST _____	
		SEC. 180		TWR. 47 N. RING. 5 EDRW	

DESCRIBE LOCATION OF THE WELL SO WE WOULD BE ABLE TO VISIT THE WELL
1/4 mi. SW on Bechtel Rd. for NW 1000' in field 160 SE of old town

DRILLER NOTES:
Water supply well for pig mill

CASING DETAILS	LENGTH 37'	O.D. OF CASING 4" IN.	WEIGHT OR SDR # 26	DIAMETER OF DRILL HOLE 30" IN.	MATERIAL <input type="checkbox"/> STEEL <input checked="" type="checkbox"/> PLASTIC <input type="checkbox"/> CONCRETE <input type="checkbox"/> OTHER	DRIVE SHOE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CASING DRIVEN <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	PACKER USED ON PVC CASING <input type="checkbox"/> NONE <input type="checkbox"/> COUPLING <input type="checkbox"/> RUBBER BOOT <input type="checkbox"/> INVERTED BELL	DEPTH SET
----------------	---------------	--------------------------	-----------------------	-----------------------------------	--	--	---	---	-----------

CASING GROUT DETAILS	POSITION OF SEAL <input type="checkbox"/> FULL LENGTH <input type="checkbox"/> BOTTOM <input checked="" type="checkbox"/> TOP	MATERIAL <input checked="" type="checkbox"/> CEMENT <input type="checkbox"/> BENTONITE <input type="checkbox"/> GRANULAR <input type="checkbox"/> MI-EARLY <input type="checkbox"/> CHIPS <input type="checkbox"/> PELLETS	NUMBER OF SACKS USED 4 1/2	LBS PER SACK	METHOD OF INSTALLATION <input checked="" type="checkbox"/> GRAVITY <input type="checkbox"/> POSITIVE DISPLACEMENT <input type="checkbox"/> OPEN HOLE <input type="checkbox"/> TREMIE	PRESSURE GROUT <input type="checkbox"/> THROUGH TREMIE <input type="checkbox"/> OTHER <input type="checkbox"/> THROUGH CASING	DRILLING SUSPENDED <input type="checkbox"/> NO <input type="checkbox"/> YES HRS.
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LINER DETAILS	<input type="checkbox"/> USED ONLY TO HOLD BACK THE FORMATION	LENGTH FT.	O.D. OF LINER IN.	WEIGHT OR SDR #	MATERIAL <input type="checkbox"/> PLASTIC <input type="checkbox"/> STEEL	DEPTH FROM TO		FORMATION AND YIELD DESCRIPTION silly clays sand
	<input type="checkbox"/> USED TO SEAL OUT CONTAMINATION OR OTHER CONDITIONS	DEPTH FROM THE SURFACE TO THE TOP OF THE LINER FT.		PACKER USED ON PVC LINER <input type="checkbox"/> NONE <input type="checkbox"/> RUBBER BOOT		DEPTHS SET 0 35' 35 77'		

LINER GROUT DETAILS	POSITION OF SEAL <input type="checkbox"/> FULL LENGTH <input type="checkbox"/> BOTTOM <input type="checkbox"/> TOP	MATERIAL <input type="checkbox"/> CEMENT <input type="checkbox"/> BENTONITE <input type="checkbox"/> GRANULAR <input type="checkbox"/> MI-EARLY <input type="checkbox"/> CHIPS <input type="checkbox"/> PELLETS	NUMBER OF SACKS USED	LBS PER SACK	METHOD OF INSTALLATION <input type="checkbox"/> AS LINER IS INSTALLED <input type="checkbox"/> TREMIE
---------------------	---	---	----------------------	--------------	---

GRAVEL PACK THICKNESS FROM 20 FT TO 35 FT	WILL A CENTRIFUGAL PUMP BE INSTALLED <input type="checkbox"/> YES <input type="checkbox"/> NO	COMPLETION DATA
--	--	-----------------

HEAT PUMP DETAILS	AMOUNT OF WATER HEAT PUMP UTILIZES	METHOD OF WATER DISPOSAL <input type="checkbox"/> SURFACE <input type="checkbox"/> RETURN WELL	PUMP DETAILS PUMP SET AT _____ G.P.M. _____ FT. FROM SURFACE	STATIC WATER LEVEL FEET FROM SURFACE
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REFERENCE NUMBER OF CERTIFICATION FORM FOR WATER RETURN WELL:	WELL YIELD 100 GPM	WELL CHLORINATED AFTER DRILLING <input type="checkbox"/> YES <input type="checkbox"/> NO	TYPE OF TOP CASING SEAL <input type="checkbox"/> PITLESS ADAPTOR <input type="checkbox"/> WELL SEAL <input type="checkbox"/> OTHER	TOTAL DEPTH:
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PRIMARY CONTRACTOR'S NAME J. K.	PERMIT NUMBER	WELL CHLORINATED AFTER SETTING PUMP <input type="checkbox"/> YES <input type="checkbox"/> NO	DATE PUMP INSTALLATION WAS COMPLETED	DATE WELL DRILLING WAS COMPLETED 4/18/97
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I HEREBY CERTIFY THAT THE WELL/PUMP HEREIN DESCRIBED WAS CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS FOR THE CONSTRUCTION OF WATER SUPPLY WELLS.

SIGNATURE (WELL OWNER) X J. K.	PERMIT NUMBER 17031324P	DATE	SIGNATURE (PUMP INSTALLER) V	PERMIT NUMBER	DATE
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5

VARIANCE ~~XXXXXXXXXXXX~~ H 963

CHK# 31481



MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND LAND SURVEY
(573) 368-2165

WATER WELL CERTIFICATION AND PUMP INFORMATION RECORD

OFFICE USE ONLY		DATE RECEIVED	
REF. NO.	169355	MAY 26 1998	
C.R. NO.	198830	CHECK NO.	36481
STATE WELL NUMBER	A 21356	TRANSFER NO.	2006
ENTERED PR. 1 PR. 2 PR. 3		APPROVED BY	[Signature]
		ROUTE	

INFORMATION SUPPLIED BY WELL OR PUMP INSTALLATION CONTRACTOR

OWNER NAME Larry Keever Keever		TELEPHONE 314 839 5019		CASING DEPTH DETERMINED BY THE D.N.R. <input type="checkbox"/> NO <input type="checkbox"/> YES. ATTACH A COPY OF THE LETTER	
OWNER ADDRESS Po Box 247		CITY O Fallon	STATE Mo	ZIP CODE 63366	
ADDRESS OF WELL SITE (IF DIFFERENT THAN ABOVE)		CITY St Charles	STATE Mo	ZIP CODE	
PROPOSED USE OF WELL <input type="checkbox"/> DOMESTIC <input type="checkbox"/> MULTI-FAMILY <input type="checkbox"/> OPEN-LOOP HEAT PUMP WATER SUPPLY <input type="checkbox"/> OPEN-LOOP HEAT PUMP WATER RETURN <input type="checkbox"/> LIVESTOCK		<input type="checkbox"/> OTHER _____ <input checked="" type="checkbox"/> IRRIGATION <input type="checkbox"/> NON COMMUNITY <input type="checkbox"/> PUBLIC WATER SUPPLY		ABANDONED WELL? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
		WAS THE ABANDONED WELL PROPERLY SEALED <input type="checkbox"/> YES <input type="checkbox"/> NO		DATE 5,20,98	
		INFORMATION VERIFIED BY OWNER SIGNATURE (WELL OWNER) X			

SKETCH THE LOCATION TO THE WELL INCLUDING MILEAGE ON ALL ROADS TRAVELED FROM NEAREST TOWNS OR HIGHWAYS		LOCATION OF WELL St Charles		AREA SURV 188A	
		LAT. _____		ELEV. 445	
		LONG. _____		COUNTY St Charles	
		SMALLEST SEC. SN 12		LARGEST TWN. 47 N. RING. 9	

DESCRIBE LOCATION OF THE WELL SO WE WOULD BE ABLE TO VISIT THE WELL	DRILLER NOTES:
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CASING DETAILS	LENGTH 85 FT.	O.D. OF CASING 16 IN.	WEIGHT OR SDR 26	DIAMETER OF DRILL HOLE 30 IN.	MATERIAL <input checked="" type="checkbox"/> PLASTIC <input type="checkbox"/> STEEL <input type="checkbox"/> OTHER	DRIVE SHOE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CASING DRIVEN <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	PACKER USED ON PVC CASING <input checked="" type="checkbox"/> NONE <input type="checkbox"/> RUBBER BOOT <input type="checkbox"/> COUPLING <input type="checkbox"/> INVERTED BELL	DEPTH SET
CASING GROUT DETAILS	POSITION OF SEAL <input checked="" type="checkbox"/> FULL LENGTH <input type="checkbox"/> BOTTOM <input type="checkbox"/> TOP	MATERIAL VARIANCE 963 <input type="checkbox"/> CEMENT <input type="checkbox"/> BENTONITE <input type="checkbox"/> TYPE 1 <input type="checkbox"/> SLURRY <input type="checkbox"/> GRANULAR <input type="checkbox"/> HI-EARLY <input type="checkbox"/> CHIPS <input type="checkbox"/> PELLETS		NUMBER OF SACKS USED 4405	METHOD OF INSTALLATION <input checked="" type="checkbox"/> GRAVITY <input type="checkbox"/> POSITIVE DISPLACEMENT <input type="checkbox"/> OPEN HOLE <input type="checkbox"/> TREMIE		PRESSURE GROUT <input type="checkbox"/> THROUGH TREMIE <input type="checkbox"/> OTHER		DRILLING SUSPENDED <input type="checkbox"/> NO <input type="checkbox"/> YES

LINER DETAILS	<input type="checkbox"/> USED ONLY TO HOLD BACK THE FORMATION		LENGTH	O.D. OF LINER	WEIGHT OR SDR	MATERIAL <input type="checkbox"/> PLASTIC <input type="checkbox"/> STEEL	DEPTH FROM		FORMATION AND YIELD DESCRIPTION
	<input type="checkbox"/> USED TO SEAL OUT CONTAMINATION OR OTHER CONDITIONS		FT.	IN.			FROM	TO	
LINER GROUT DETAILS	<input type="checkbox"/> USED TO SEAL OUT RUST		DEPTH FROM THE SURFACE TO THE TOP OF THE LINER		PACKER USED ON PVC LINER <input type="checkbox"/> NONE <input type="checkbox"/> RUBBER BOOT		DEPTHS SET		silt med. sand med. to coarse sand
	POSITION OF SEAL <input type="checkbox"/> FULL LENGTH <input type="checkbox"/> BOTTOM <input type="checkbox"/> TOP	MATERIAL <input type="checkbox"/> CEMENT <input type="checkbox"/> BENTONITE <input type="checkbox"/> TYPE 1 <input type="checkbox"/> SLURRY <input type="checkbox"/> GRANULAR <input type="checkbox"/> HI-EARLY <input type="checkbox"/> CHIPS <input type="checkbox"/> PELLETS		NUMBER OF SACKS USED	LBS. PER SACK		METHOD OF INSTALLATION <input type="checkbox"/> AS LINER IS INSTALLED <input type="checkbox"/> TREMIE		

GRAVEL PACK THICKNESS	FROM 2.0 FT TO 8.5 FT	WILL A CENTRIFUGAL PUMP BE INSTALLED <input type="checkbox"/> YES <input type="checkbox"/> NO	COMPLETION DATA	
HEAT PUMP DETAILS	AMOUNT OF WATER HEAT PUMP UTILIZES	METHOD OF WATER DISPOSAL <input type="checkbox"/> SURFACE <input type="checkbox"/> RETURN WELL	PUMP DETAILS	STATIC WATER LEVEL
REFERENCE NUMBER OF CERTIFICATION FORM FOR WATER RETURN WELL		WELL YIELD	PUMP SET AT _____ FEET FROM SURFACE	

PRIMARY CONTRACTOR'S NAME GARY SISK		PERMIT NUMBER 2032	DATE 52198X	SIGNATURE (PUMP INSTALLER)	PERMIT NUMBER	DATE
THEREBY CERTIFY THAT THE WELL/PUMP HEREIN DESCRIBED WAS CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS FOR THE CONSTRUCTION OF WATER SUPPLY WELLS.		SIGNATURE (WELL DRILLER) X [Signature]		DATE PUMP INSTALLATION WAS COMPLETED		DATE WELL DRILLING WAS COMPLETED 5-16-98

MO 780-022 (10-98) DISTRIBUTION: WHITE/DIVISION CANARY/CONTRACTOR PINK/OWNER
MAIL WHITE COPY TO: DEPARTMENT OF NATURAL RESOURCES, P.O. BOX 250, ROLLA, MO 65402

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Variance 1117



MISSOURI DEPARTMENT OF
NATURAL RESOURCES
DIVISION OF GEOLOGY AND
LAND SURVEY
(573) 368-2165
**WATER WELL CERTIFICATION
AND PUMP INFORMATION RECORD**

OFFICE USE ONLY
NET NO. 218382
CA NO.
STATE WELL
ENTER

INFORMATION SUPPLIED BY WELL OR PUMP INSTALLATION CONTRACTOR

OWNER NAME <i>Virginia Thuele Thuele</i>	TELEPHONE <i>314-724-6111</i>	CASING DEPTH DETERMINED BY THE D.N.R. <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, ATTACH A COPY OF THE LETTER
OWNER ADDRESS <i>1020 Hawthorne</i>	CITY <i>St. Charles</i>	STATE <i>Mo</i>
ADDRESS OF WELL SITE (IF DIFFERENT THAN ABOVE) <i>3527 N HWY 94</i>	CITY <i>St. Charles</i>	STATE <i>Mo</i>
	ZIP CODE <i>63301</i>	IF VARIANCE WAS GRANTED PLEASE ATTACH A COPY <i>11179</i>

PROPOSED USE OF WELL <input checked="" type="checkbox"/> DOMESTIC <input type="checkbox"/> MULTI-FAMILY <input type="checkbox"/> OPEN-LOOP HEAT PUMP WATER SUPPLY <input type="checkbox"/> OPEN-LOOP HEAT PUMP WATER RETURN <input type="checkbox"/> LIVESTOCK	<input type="checkbox"/> OTHER _____ <input type="checkbox"/> IRRIGATION <input type="checkbox"/> NON COMMUNITY <input type="checkbox"/> PUBLIC WATER SUPPLY	ABANDONED WELL? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	WAS THE ABANDONED WELL PROPERLY SEALED <input type="checkbox"/> YES <input type="checkbox"/> NO
INFORMATION VERIFIED BY OWNER SIGNATURE (WELL OWNER, OPTIONAL) <i>X</i>		DATE	

SKETCH THE LOCATION OF THE WELL INCLUDING MILEAGE ON ALL ROADS TRAVELED FROM NEAREST TOWNS OR HIGHWAYS 	LOCATION OF WELL <i>St. Charles</i>	COUNTY <i>St. Charles</i>
	SMALLEST <i>16g</i>	LARGEST <i>NEWS 54 1/2</i>
	SEC. <i>9</i>	TWN. <i>47</i> N. RANG. <i>50</i> E OR W

DESCRIBE LOCATION OF THE WELL SO WE WOULD BE ABLE TO VISIT THE WELL SITE <i>well is N. of garage</i>	DRILLER NOTES:
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CASING DETAILS	LENGTH <i>30 1/2 FT.</i>	O.D. OF CASING <i>6 5/8 IN.</i>	WEIGHT OR SDR # <i>PVC 40</i>	DIAMETER OF DRILL HOLE <i>12 IN.</i>	MATERIAL <input checked="" type="checkbox"/> PLASTIC <input type="checkbox"/> STEEL <input type="checkbox"/> CONCRETE <input type="checkbox"/> OTHER	DRIVE SHOPE <input type="checkbox"/> YES <input type="checkbox"/> NO	CASING DRIVEN <input type="checkbox"/> YES <input type="checkbox"/> NO	PACKER USED ON PVC CASING <input type="checkbox"/> NONE <input type="checkbox"/> RUBBER BOOT <input type="checkbox"/> COUPLING <input type="checkbox"/> INVERTED BELL	DEPTH SET
CASING GROUT DETAILS	POSITION OF SEAL <input checked="" type="checkbox"/> FULL LENGTH <input type="checkbox"/> BOTTOM <input type="checkbox"/> TOP	MATERIAL CEMENT <input type="checkbox"/> TYPE 1 <input type="checkbox"/> H-EARLY <input checked="" type="checkbox"/> BENTONITE <input type="checkbox"/> SLURRY <input type="checkbox"/> CHIPS <input type="checkbox"/> GRANULAR <input type="checkbox"/> PELLETS	NUMBER OF SACKS USED <i>18</i>	METHOD OF INSTALLATION <input checked="" type="checkbox"/> GRAVITY <input type="checkbox"/> POSITIVE DISPLACEMENT <input type="checkbox"/> OPEN HOLE <input type="checkbox"/> TREMIE	PRESSURE GROUT <input type="checkbox"/> THROUGH TREMIE <input type="checkbox"/> THROUGH CASING	DRILLING SUSPENDED <input type="checkbox"/> NO <input type="checkbox"/> YES		HRS.	

LINER DETAILS	<input type="checkbox"/> USED ONLY TO HOLD BACK THE FORMATION <input type="checkbox"/> USED TO SEAL OUT CONTAMINATION OR OTHER CONDITIONS <input type="checkbox"/> USED TO SEAL OUT RUST	LENGTH FT.	O.D. OF LINER IN.	WEIGHT OR SDR #	MATERIAL <input type="checkbox"/> PLASTIC <input type="checkbox"/> STEEL	DEPTH FROM TO		FORMATION AND YIELD DESCRIPTION
		DEPTH FROM THE SURFACE TO THE TOP OF THE LINER FT.		PACKER USED ON PVC LINER <input type="checkbox"/> NONE <input type="checkbox"/> RUBBER BOOT				
LINER GROUT DETAILS	POSITION OF SEAL <input type="checkbox"/> FULL LENGTH <input type="checkbox"/> BOTTOM <input type="checkbox"/> TOP	MATERIAL CEMENT <input type="checkbox"/> TYPE 1 <input type="checkbox"/> H-EARLY <input checked="" type="checkbox"/> BENTONITE <input type="checkbox"/> SLURRY <input type="checkbox"/> CHIPS <input type="checkbox"/> GRANULAR <input type="checkbox"/> PELLETS	NUMBER OF SACKS USED	LBS. PER SACK	METHOD OF INSTALLATION <input type="checkbox"/> AS LINER IS INSTALLED <input type="checkbox"/> TREMIE			

WELL YIELD <i>25 +</i>	WELL CHLORINATED AFTER DRILLING <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	COMPLETION DATA	DEPTH
GRAVEL PACK THICKNESS FROM <i>25</i> FT TO <i>4 1/2</i> FT	WILL A CENTRIFUGAL PUMP BE INSTALLED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	PUMP DETAILS <i>15</i> G.P.M. PUMP SET AT <i>45</i> FT.	STATIC WATER LEVEL <i>22</i> FEET FROM SURFACE
HEAT PUMP DETAILS	AMOUNT OF WATER HEAT PUMP UTILIZES	METHOD OF WATER DISPOSAL <input type="checkbox"/> SURFACE <input type="checkbox"/> RETURN WELL	
REFERENCE NUMBER OF CERTIFICATION FORM FOR WATER RETURN WELL:		TYPE OF TOP CASING SEAL <input checked="" type="checkbox"/> PITLESS ADAPTOR <input type="checkbox"/> WELL SEAL <input type="checkbox"/> OTHER	TOTAL DEPTH: <i>45 1/2'</i>

SIGNATURE (PRIMARY CONTRACTOR) <i>[Signature]</i>	PERMIT NUMBER <i>WP 1493</i>	WELL CHLORINATED AFTER SETTING PUMP <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	DATE PUMP INSTALLATION WAS COMPLETED <i>5-30-99</i>	DATE WELL DRILLING WAS COMPLETED <i>3-25-99</i>
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I HEREBY CERTIFY THAT THE WELL/PUMP HEREIN DESCRIBED WAS CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS FOR THE CONSTRUCTION OF WATER SUPPLY WELLS.					
SIGNATURE (WELL DRILLER) <i>X [Signature]</i>	PERMIT NUMBER	DATE <i>4-12-99</i>	SIGNATURE (PUMP INSTALLER) <i>X</i>	PERMIT NUMBER	DATE



MISSOURI DEPARTMENT OF
NATURAL RESOURCES
DIVISION OF GEOLOGY AND
LAND SURVEY
(573) 368-2165
**WATER WELL CERTIFICATION
AND PUMP INFORMATION RECORD**

OFFICE USE ONLY		DATE RECEIVED	
REF. NO.	251797	CHECK NO.	JUL 20 2008
C.R. NO.		REVENUE NO.	56052
STATE WELL NUMBER	A94662D	REVENUE NO.	072000
ENTERED BY	MW	APPROVED BY	PCO
		ROUTE	1

INFORMATION SUPPLIED BY WELL OR PUMP INSTALLATION CONTRACTOR

OWNER NAME NATIONAL CART / UNNERSTALL, LLC		TELEPHONE		CASING DEPTH DETERMINED BY DNR <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
OWNER ADDRESS 2080 EXCHANGE DRIVE		CITY ST. CHARLES	STATE MO	ZIP CODE 63303	IF YES, ATTACH A COPY
ADDRESS OF WELL SITE (IF DIFFERENT THAN ABOVE) BOSEHERTOWN ROAD		CITY ST. CHARLES	STATE MO	ZIP CODE 63301	VARIANCE GRANTED BY DNR <input type="checkbox"/> YES <input type="checkbox"/> NO
PROPOSED USE OF WELL		ABANDONED WELL?		DATE PLUGGED	
<input type="checkbox"/> DOMESTIC <input type="checkbox"/> MULTI-FAMILY <input type="checkbox"/> OPEN-LOOP HEAT PUMP WATER SUPPLY <input type="checkbox"/> OPEN-LOOP HEAT PUMP WATER RETURN <input type="checkbox"/> OTHER		<input type="checkbox"/> IRRIGATION <input type="checkbox"/> NON COMMUNITY <input checked="" type="checkbox"/> PUBLIC WATER SUPPLY alluvial		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO INFORMATION VERIFIED BY OWNER SIGNATURE (WELL OWNER, OPTIONAL) X	

SKETCH THE LOCATION TO THE WELL INCLUDING MILEAGE ON ALL ROADS TRAVELED FROM NEAREST TOWNS OR HIGHWAYS 		LOCATION OF WELL LAT. _____ LONG. _____ COUNTY ST. CHARLES	
DESCRIBE LOCATION OF THE WELL SO WE WOULD BE ABLE TO VISIT THE WELL SITE Bosehertown Rd 94.5		DRILLER NOTES: SMALLEST 1/4 S. SURVEY 208 TWN. 47 N. RANG. 5 (E) RW	

CASING DETAILS LENGTH 50 FT. O.D. OF CASING 8 " IN. WEIGHT OR SDR # 40 DIAMETER OF DRILL HOLE 30 IN. MATERIAL <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> PLASTIC <input type="checkbox"/> CONCRETE	DRIVE SHOE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO CASING DRIVEN <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO PACKER USED ON PVC CASING <input type="checkbox"/> NONE <input type="checkbox"/> COUPLING <input type="checkbox"/> RUBBER BOOT <input type="checkbox"/> INVERTED BELL	DEPTH SET
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CASING GROUT DETAILS POSITION OF SEAL <input checked="" type="checkbox"/> FULL LENGTH <input type="checkbox"/> BOTTOM <input type="checkbox"/> TOP MATERIAL <input checked="" type="checkbox"/> CEMENT <input type="checkbox"/> BENTONITE <input type="checkbox"/> TYPE 1 <input type="checkbox"/> SLURRY <input type="checkbox"/> GRANULAR <input type="checkbox"/> M-EARLY <input type="checkbox"/> CHIPS <input type="checkbox"/> PELLETS	NUMBER OF SACKS USED 4 yds LBS PER SACK	METHOD OF INSTALLATION <input type="checkbox"/> GRAVITY <input type="checkbox"/> POSITIVE DISPLACEMENT <input type="checkbox"/> OPEN HOLE <input type="checkbox"/> TREMIE <input checked="" type="checkbox"/> THROUGH CASING	PRESSURE GROUT <input type="checkbox"/> THROUGH TREMIE <input checked="" type="checkbox"/> THROUGH CASING	DRILLING SUSPENDED <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES 72 HRS. +
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LINER DETAILS <input type="checkbox"/> USED ONLY TO HOLD BACK THE FORMATION <input type="checkbox"/> USED TO SEAL OUT CONTAMINATION OR OTHER CONDITIONS <input type="checkbox"/> USED TO SEAL OUT RUST	LENGTH _____ FT. O.D. OF LINER _____ IN. WEIGHT OR SDR # _____ MATERIAL <input type="checkbox"/> PLASTIC <input type="checkbox"/> STEEL	DEPTH FROM TO 0 5 5 15 15 80	FORMATION AND YIELD DESCRIPTION Dirt Sand Sand & Gravel
	DEPTH FROM THE SURFACE TO THE TOP OF THE LINER _____ FT. PACKER USED ON PVC LINER <input type="checkbox"/> NONE <input type="checkbox"/> RUBBER BOOT	DEPTHS SET	
	LINER GROUT DETAILS POSITION OF SEAL <input type="checkbox"/> FULL LENGTH <input type="checkbox"/> BOTTOM <input type="checkbox"/> TOP MATERIAL <input type="checkbox"/> CEMENT <input type="checkbox"/> BENTONITE <input type="checkbox"/> TYPE 1 <input type="checkbox"/> SLURRY <input type="checkbox"/> GRANULAR <input type="checkbox"/> M-EARLY <input type="checkbox"/> CHIPS <input type="checkbox"/> PELLETS	NUMBER OF SACKS USED _____ LBS. PER SACK _____ METHOD OF INSTALLATION <input type="checkbox"/> AS LINER IS INSTALLED <input type="checkbox"/> TREMIE	

WELL YIELD 500 WELL CHLORINATED AFTER DRILLING <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	WILL A CENTRIFUGAL PUMP BE INSTALLED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> NEW PUMP <input type="checkbox"/> REPLACEMENT PUMP DETAILS 50 G.P.M. PUMP SET AT 63 FT. FROM SURFACE	STATIC WATER LEVEL 10 FEET FROM SURFACE
GRAVEL PACK THICKNESS FROM 80 FT TO 40 FT	SCREEN LENGTH FROM 80 FT TO 50 FT	TYPE OF TOP CASING SEAL <input checked="" type="checkbox"/> PITLESS ADAPTOR <input type="checkbox"/> WELL SEAL <input type="checkbox"/> OTHER	

HEAT PUMP DETAILS AMOUNT OF WATER HEAT PUMP UTILIZES _____ METHOD OF WATER DISPOSAL <input type="checkbox"/> SURFACE <input type="checkbox"/> RETURN WELL	REFERENCE NUMBER OF CERTIFICATION FORM FOR WATER RETURN WELL: _____ SIGNATURE (PRIMARY CONTRACTOR) _____ PERMIT NUMBER _____	WELL CHLORINATED AFTER SETTING PUMP <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	DATE PUMP INSTALLATION WAS COMPLETED 7-7-00	DATE WELL DRILLING WAS COMPLETED 5-00
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I HEREBY CERTIFY THAT THE WELL/PUMP/SCREEN DESCRIBED WAS CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS FOR THE CONSTRUCTION OF WATER SUPPLY WELLS.

SIGNATURE (WELL DRILLER)	PERMIT NUMBER	DATE	SIGNATURE (PUMP INSTALLER)	PERMIT NUMBER	DATE
X	0011202PH	7-7-00	X	0011202PH	7-7-00

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MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND LAND SURVEY
(573) 368-2165

WATER WELL CERTIFICATION AND PUMP INFORMATION RECORD

OFFICE USE ONLY		DATE RECEIVED
REF. NO.	225700	JUL 26 1999
C.R. NO.		CHECK NO. 51744
STATE WELL NUMBER	A 79197	TRANSMISSION NO. 072699
ENTERED Ph 1 GB Ph 2 GB Ph 3 GB	APPROVED BY ACK	ROUTE 1

INFORMATION SUPPLIED BY WELL OR PUMP INSTALLATION CONTRACTOR

OWNER NAME Kurtz / Lafarge Corp.	PHONE 314-940-0073	CASING DEPTH DETERMINED BY DNR <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, ATTACH A COPY
OWNER ADDRESS 2115 South River Rd	CITY St Charles STATE Mo ZIP CODE 63303	VARIANCE GRANTED BY DNR <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, NUMBER _____ ATTACH A COPY
ADDRESS OF WELL SITE (IF DIFFERENT THAN ABOVE)	CITY STATE ZIP CODE	

PROPOSED USE OF WELL <input checked="" type="checkbox"/> DOMESTIC <input type="checkbox"/> MULTI-FAMILY <input type="checkbox"/> OPEN-LOOP HEAT PUMP WATER SUPPLY <input type="checkbox"/> OPEN-LOOP HEAT PUMP WATER RETURN <input type="checkbox"/> OTHER	<input type="checkbox"/> IRRIGATION <input type="checkbox"/> NON COMMUNITY <input type="checkbox"/> PUBLIC WATER SUPPLY	ABANDONED WELL? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	WAS THE ABANDONED WELL PROPERLY PLUGGED <input type="checkbox"/> YES <input type="checkbox"/> NO	DATE PLUGGED
INFORMATION VERIFIED BY OWNER SIGNATURE (WELL OWNER, OPTIONAL)				DATE

SKETCH THE LOCATION TO THE WELL INCLUDING MILEAGE ON ALL ROADS TRAVELED FROM NEAREST TOWNS OR HIGHWAYS 	LOCATION OF WELL LAT. _____ LONG. _____	AREA 41 ELEV 450 COUNTY St. Charles
	SMALLEST _____ LARGEST _____ SEC. 6 TWN. 46 N. RANG. 5 OR W	

DESCRIBE LOCATION OF THE WELL SO WE WOULD BE ABLE TO VISIT THE WELL SITE	DRILLER NOTES:
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CASING DETAILS	LENGTH 105 FT.	O.D. OF CASING 6 1/4 IN.	WEIGHT OR SDR # 1.188	DIAMETER OF DRILL HOLE 8 5/8 IN.	MATERIAL <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> PLASTIC <input type="checkbox"/> CONCRETE	DRIVE SHOE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	CASING DRIVEN <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	PACKER USED ON PVC CASING <input checked="" type="checkbox"/> NONE <input type="checkbox"/> COUPLING <input type="checkbox"/> RUBBER BOOT <input type="checkbox"/> INVERTED BELL	DEPTH SET
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CASING GROUT DETAILS	POSITION OF SEAL <input checked="" type="checkbox"/> FULL LENGTH <input type="checkbox"/> BOTTOM <input type="checkbox"/> TOP	MATERIAL CEMENT <input type="checkbox"/> BENTONITE <input type="checkbox"/> TYPE 1 <input type="checkbox"/> SLURRY <input type="checkbox"/> GRANULAR <input type="checkbox"/> HI-EARLY <input type="checkbox"/> CHIPS <input type="checkbox"/> PELLETS	NUMBER OF SACKS USED 5	METHOD OF INSTALLATION <input type="checkbox"/> GRAVITY <input type="checkbox"/> POSITIVE DISPLACEMENT <input type="checkbox"/> OPEN HOLE <input checked="" type="checkbox"/> TREMIE	PRESSURE GROUT <input type="checkbox"/> THROUGH TREMIE <input type="checkbox"/> THROUGH CASING	DRILLING SUSPENDED <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES _____ HRS.
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LINER DETAILS	<input type="checkbox"/> USED ONLY TO HOLD BACK THE FORMATION	LENGTH _____ FT.	O.D. OF LINER _____ IN.	WEIGHT OR SDR # _____	MATERIAL <input type="checkbox"/> PLASTIC <input type="checkbox"/> STEEL	DEPTH FROM _____ TO _____	FORMATION AND YIELD DESCRIPTION
	<input type="checkbox"/> USED TO SEAL OUT CONTAMINATION OR OTHER CONDITIONS	DEPTH FROM THE SURFACE TO THE TOP OF THE LINER _____ FT.	PACKER USED ON PVC LINER <input type="checkbox"/> NONE <input type="checkbox"/> RUBBER BOOT	DEPTHS SET			

LINER GROUT DETAILS	POSITION OF SEAL <input type="checkbox"/> FULL LENGTH <input type="checkbox"/> BOTTOM <input type="checkbox"/> TOP	MATERIAL CEMENT <input type="checkbox"/> BENTONITE <input type="checkbox"/> TYPE 1 <input type="checkbox"/> SLURRY <input type="checkbox"/> GRANULAR <input type="checkbox"/> HI-EARLY <input type="checkbox"/> CHIPS <input type="checkbox"/> PELLETS	NUMBER OF SACKS USED	LBS. PER SACK	METHOD OF INSTALLATION <input type="checkbox"/> AS LINER IS INSTALLED <input type="checkbox"/> TREMIE
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WELL YIELD 6 gpm	WELL CHLORINATED AFTER DRILLING <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	NEW PUMP <input type="checkbox"/> REPLACEMENT <input type="checkbox"/>
GRAVEL PACK THICKNESS	FROM _____ FT TO _____ FT	WILL A CENTRIFUGAL PUMP BE INSTALLED <input type="checkbox"/> YES <input type="checkbox"/> NO
SCREEN LENGTH	FROM _____ FT TO _____ FT	PUMP DETAILS 5 G.P.M. 380 FT. PUMP SET AT 210 FEET FROM SURFACE

HEAT PUMP DETAILS	AMOUNT OF WATER HEAT PUMP UTILIZES	METHOD OF WATER DISPOSAL <input type="checkbox"/> SURFACE <input type="checkbox"/> RETURN WELL	TYPE OF TOP CASING SEAL <input checked="" type="checkbox"/> PITLESS ADAPTOR <input type="checkbox"/> WELL SEAL <input type="checkbox"/> OTHER
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REFERENCE NUMBER OF CERTIFICATION FORM FOR WATER RETURN WELL	SIGNATURE (PRIMARY CONTRACTOR) Ken Dullin Co	PERMIT NUMBER 001120WPT	WELL CHLORINATED AFTER SETTING PUMP <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	DATE PUMP INSTALLATION WAS COMPLETED 7-13-99	DATE WELL DRILLING WAS COMPLETED 7-8-99
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I HEREBY CERTIFY THAT THE WELL/PUMP HEREIN DESCRIBED WAS CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS FOR THE CONSTRUCTION OF WATER SUPPLY WELLS.					
SIGNATURE (WELL DRILLER)	PERMIT NUMBER	DATE	SIGNATURE (PUMP INSTALLER)	PERMIT NUMBER	DATE
X	001120WPT	7-22-99	X	001120WPT	7-22-99

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MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF GEOLOGY AND LAND SURVEY WATER WELL CERTIFICATION AND PUMP INFORMATION RECORD

OFFICE USE ONLY RECEIVED DEC 11 1996 CHECK NO. 870319611 ROUTE PCO TRANSMITTAL NO. 784011 STATE WELL NUMBER 157292 DROPS REFERENCE NO. CHECKED BY ENTERED APPROVED BY FK DATE APPROVED 9/15/96

INFORMATION SUPPLIED BY OWNER NAME: Fred Weber, Inc. ADDRESS: P.O. Box 2501, Maryland Heights, MO. PROPOSED USE OF WELL: IRRIGATION. VARIANCE ISSUED? NO. DATE ISSUED: 12/18/96.

INFORMATION SUPPLIED BY WELL OR PUMP INSTALLATION CONTRACTOR LOCATION OF WELL: COUNTY ST. LOUIS, ELEVATION 450'. SKECHON THE LOCATION TO THE WELL INCLUDING MILEAGE ON ALL ROADS TRAVELED FROM NEAREST TOWNS OR HIGHWAYS. WELLS: CRYSTAL SPRING QUARRY GOLF CLUB.

DESCRIBE LOCATION OF THE WELL SO WE WOULD BE ABLE TO VISIT THE WELL TO TO EARTH CITY EXPRESSWAY, EARTH CITY EXPRESSWAY SOUTH TO GREVE COVER MILL ROAD, GREVE COVER MILL ROAD WEST 150 YDS. SOUTH TO CRYSTAL SPRING GOLF QUARRY.

WELL INSTALLATION CONTRACTOR'S NAME: LAYNE-WESTERN COMPANY PERMIT NUMBER: A 001261NPM

WELL CONSTRUCTION INFORMATION

CASING DETAILS: LENGTH 67 FT., DIAMETER OF CASING 10 IN., WEIGHT OR SOLE .365 WEL. CASING GROUT DETAILS: TYPE USED NONE, POSITION OF SEAL FULL LENGTH, MATERIAL CEMENT SLURRY. LINER DETAILS: PURPOSE OF LINER USED TO SEAL OUT CONTAMINATION, MEASURED DEPTH FROM THE SURFACE TO THE TOP OF THE LINER 47-47 FT. LINER PACKER DETAILS: TYPE USED NONE, DEPTHS SET Packer 1, Packer 2, Packer 3. LINER GROUT DETAILS: POSITION OF SEAL FULL LENGTH, MATERIAL CEMENT SLURRY. ALLUVIAL SCREEN DETAILS: MAKE OR TYPE S20 G.P.M., SLOT SIZE .060, GRAVEL PACK. YIELD TEST: COMPRESSED AIR, BAILED PUMP, STATIC WATER LEVEL 12 FEET FROM SURFACE, DRAIN DURING YIELD TEST DOWN 14 FEET AFTER 4 HOURS. WELL INSPECTED AFTER DRILLING? YES. TYPE OF TOP CASING SEAL PITLESS ADAPTOR. PUMP SET BY DRILLER. DATE WELL CONSTRUCTION WAS COMPLETED 9/19/96.

INFORMATION SUPPLIED BY PUMP INSTALLATION CONTRACTOR

PUMP CONTRACTOR'S NAME: LAYNE-WESTERN COMPANY PERMIT NUMBER: 001261NPM COMPLETION DATA: PUMP DETAILS 30 HP, 520 G.P.M., PUMP SET AT 62.5 FT. WELL INSPECTED AFTER SETTING PUMP? YES. TYPE OF DROP PIPE GALVANIZED. DATE PUMP INSTALLATION WAS COMPLETED 11/5/96.

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MISSOURI DEPARTMENT OF NATURAL RESOURCES DIVISION OF GEOLOGY AND LAND SURVEY WATER WELL CERTIFICATION AND PUMP INFORMATION RECORD

OFFICE USE ONLY DATE RECEIVED MAR 20 2000 REF. NO. CHECK NO. 8706911 HOURS PER TRANSMITTAL NO. 082100 STATE WELL NUMBER A87214 CROSS REFERENCE NO. OKAYED BY APPROVED BY

INFORMATION SUPPLIED BY OWNER NAME Crystal Springs Quarry Golf Club TELEPHONE 636-344-4448 ADDRESS 12162 Prichard Farm Road Maryland Heights STATE MO ZIP CODE 63043

OWNER STATUS PRIVATE HOME OWNER BUILDER DEVELOPER OTHER (SPECIFY) GOLF COURSE PROPOSED USE OF WELL DOMESTIC (1 TO 3 CONNECTIONS) IRRIGATION MULTIFAMILY PUBLIC WATER SUPPLY HEATPUMP WATER SUPPLY HEATPUMP WATER RETURN VARIANCE ISSUED? YES NO VARIANCE NUMBER V SIGNATURE (WELL OWNER) DATE

INFORMATION SUPPLIED BY WELL OR PUMP INSTALLATION CONTRACTOR LOCATION OF WELL SHOW LOCATION IN SECTION PLAT COUNTY ST. LOUIS ELEVATION 446 AREA NO. A1 LARGEST X NE NW SE TYP. 46 HANG. 5 LAT. LONG. DESCRIBE LOCATION OF THE WELL TAKE EARL CITY EXPRESSWAY SOUTH FROM I-70 SOUTH TO CAME COVER MILL ROAD (WEST) ABOUT 1 MILE YOU WILL SEE AUTO SALVAGE, ENTRANCE WEST OF AUTO SALVAGE, FOLLOW CRAWL

WELL INSTALLATION CONTRACTOR'S NAME LANE-WESTERN (Craig Skouby) PERMIT NUMBER A 001261WPM

WELL CONSTRUCTION INFORMATION CASING DETAILS LENGTH 40 FT. DIAMETER OF CASING 1/2 IN. HEIGHT ON JOINT 62.58 IN. DIAMETER OF DRILL PIPE 3/4 IN. JOINTS THREADED GLUED WELDED DRIVE SHOC YES NO MATERIAL PLASTIC STEEL CONCRETE CASING PACKER DETAILS TYPE USED NONE RUBBER BOOT COUPLING INVERTED BELL DEPTH SET FT. DEPTH FORMATION DESCRIPTION YIELD POSITION OF SEAL MATERIAL FULL LENGTH CEMENT SLURRY BENTONITE CHIPS GRANULAR PELLETS TOP BOTTOM DRILLING SUSPENDED AFTER GROUTING YES 72 HOURS NO LINER DETAILS PURPOSE OF LINER USED ONLY TO HOLD BACK THE FORMATION USED TO SEAL OUT CONTAMINATION OR OTHER CONDITIONS MEASURED DEPTH FROM THE SURFACE TO THE TOP OF THE LINER FT. MEASURED DEPTH FROM THE SURFACE TO THE BOTTOM OF THE LINER FT. DIAMETER OF LINER IN. JOINTS THREADED GLUED WELDED MATERIAL STEEL PLASTIC LINER PACKER DETAILS TYPE USED NONE RUBBER BOOT DEPTHS SET PACKER 1 FT. PACKER 2 FT. PACKER 3 FT. POSITION OF SEAL MATERIAL FULL LENGTH CEMENT SLURRY BENTONITE CHIPS GRANULAR PELLETS TOP BOTTOM ALLUVIAL BORDER DETAILS MAKE OR TYPE STRIP BACK STEEL NAC-WRAP SLOT SIZE 060 GRAVEL PACK DRAIN SIZE 1/2 IN. DIA. BASH 1/2 X 3/4 THICKNESS 1/8 IN. FROM 80 FT. TO 10 FT. YIELD TEST COMPRESSED AIR SAILED OTHER PUMP YIELD 1500 GPM STATIC WATER LEVEL 18 FEET FROM SURFACE DRAIN DURING YIELD TEST DOWN 10 FEET AFTER 24 HOURS ABANDONED WELL YES NO HAS THE ABANDONED WELL PROPERLY SEALED YES NO WELL DISINFECTED AFTER DRILLING? YES NO TYPE OF TOP CASING SEAL PITLESS ADAPTOR WELL SEAL OTHER PUMP SET BY DRILLER PUMP INSTALLER OWNER DATE WELL CONSTRUCTION WAS COMPLETED 2/11/2000 I HEREBY CERTIFY THAT THE WELL HEREIN DESCRIBED WAS CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS FOR THE CONSTRUCTION OF WATER SUPPLY WELLS SIGNATURE (WELL DRILLER) DATE 3/10/00

INFORMATION SUPPLIED BY PUMP INSTALLATION CONTRACTOR PUMP CONTRACTOR'S NAME LANE-WESTERN Jansen Skouby PERMIT NUMBER 001260WP COMPLETION DATA PUMP DETAILS 1500 G.P.M. 60 HP WELL DISINFECTED AFTER SETTING PUMP YES NO TYPE OF DROP PIPE 1 INCH STEEL PLASTIC GALVANIZED DATE PUMP INSTALLATION WAS COMPLETED 3/3/2000 I HEREBY CERTIFY THAT THE PUMP HEREIN DESCRIBED WAS INSTALLED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS FOR THE CONSTRUCTION OF WATER SUPPLY WELLS SIGNATURE (PUMP INSTALLER) DATE 3/10/00

1500 GPM



MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND LAND SURVEY

**WATER WELL RECORD
AND
PUMP INFORMATION RECORD**

(PLEASE PRINT CLEARLY)

DO NOT FILL IN		REC'D SEP 04 1990
W.P. NO. 54413	CHECK NO. 2137	
CROSS REFERENCE NO.	TRANSMITTAL NO. 6661031	
STATE WELL NUMBER 465111	ENTERED BY ACD	
CHECKED BY	DATE ENTERED	
APPROVED BY [Signature]	DATE APPROVED	3-

OWNER NAME: Joe Keever		ADDRESS: Rt 1 Box 141		CITY: Bridgton		STATE: Mo		ZIP CODE: 63042		TELEPHONE NO: 314-739-7929	
OWNER STATUS: <input type="checkbox"/> BUILDING CONTRACTOR <input type="checkbox"/> PRIVATE HOMEOWNER		<input type="checkbox"/> DEVELOPER <input checked="" type="checkbox"/> OTHER (SPECIFY): Homeowner		<input type="checkbox"/> BUILDER							
DRILLING CONTRACTOR NAME: William W. Worth		PUMP CONTRACTOR NAME:		DATE COMPLETED: 10-05-88		EXPERIMENTAL CERTIFICATION NUMBER:					
DRILLING EQUIPMENT: <input type="checkbox"/> MUD ROTARY <input type="checkbox"/> REVERSE ROTARY <input type="checkbox"/> AIR ROTARY		<input type="checkbox"/> CABLE TOOL <input type="checkbox"/> AUGER (TYPE):		<input checked="" type="checkbox"/> OTHER (SPECIFY): Sand							
CASING DETAILS: LENGTH 21' 12"		WEIGHT OR SOR NO:		DIAM. OF DRILL HOLE: 20"		JOINTS: <input checked="" type="checkbox"/> WELDED <input type="checkbox"/> GLUED		MATERIAL: <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> PLASTIC		<input type="checkbox"/> OTHER (SPECIFY):	
PACKER INFORMATION: USED ON CASING:		PACKER DEPTH (FT.):		USED ON LINER: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		PACKER DEPTH (FT.):					
CASING GROUTING DETAILS: TYPE OF SEAL: <input type="checkbox"/> FULL LENGTH <input type="checkbox"/> TOP <input type="checkbox"/> BOTTOM		MATERIAL USED: <input type="checkbox"/> NEAT CEMENT <input type="checkbox"/> BENTONITE <input type="checkbox"/> CUTTINGS <input type="checkbox"/> OTHER		DEPTH OF SEAL: TOP BOTTOM		SACKS OF CEMENT OR BENTONITE USED: TOP BOTTOM		DRILLING SUSPENDED TO HOLE AFTER GROUTING: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
LINER DETAILS: LENGTH: -		WEIGHT OR SOR NO:		DEPTH FROM LAND SURFACE:		JOINTS: <input type="checkbox"/> THREADED <input type="checkbox"/> WELDED <input type="checkbox"/> GLUED		MATERIAL: <input type="checkbox"/> STEEL <input type="checkbox"/> PLASTIC		<input type="checkbox"/> OTHER (SPECIFY):	
LINER GROUTING DETAILS: TYPE OF SEAL: <input type="checkbox"/> FULL LENGTH <input type="checkbox"/> TOP <input type="checkbox"/> BOTTOM		MATERIAL USED: <input type="checkbox"/> NEAT CEMENT <input type="checkbox"/> BENTONITE <input type="checkbox"/> OTHER		DEPTH OF SEAL: TOP BOTTOM		SACKS OF CEMENT OR BENTONITE USED: TOP BOTTOM					
SCREEN DETAILS: MAKE OR TYPE: ABRAS		LENGTH OPEN TO BOTTOM (FT.): 40'		SLOT SIZE: .03		DIAM. (IN): 12"		THICKNESS OF GRAVEL PACK: 4" on br. w. l. e.		GRAVEL SIZE: 14 to 20 mesh (IN) FROM (FT): 60 TO (FT): 40	
YIELD TEST: <input type="checkbox"/> BAILED <input type="checkbox"/> PUMPED <input type="checkbox"/> COMPRESSED AIR		HOURS:		YIELD (GPM):		WELL DISINFECTED AFTER DRILLING: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		TYPE OF TOP CASING SEAL: <input type="checkbox"/> PITLESS ADAPTER <input checked="" type="checkbox"/> WELL SEAL <input type="checkbox"/> OTHER: Steel			
WATER LEVEL: MEASURE FROM LAND SURFACE STATIC (FT.):		DRAIN DOWN OR PUMPING LEVEL DURING YIELD TEST: _____ FT AFTER _____ HOURS		ABANDONED WELL: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		IS THIS AN ABANDONED WELL? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		WAS IT PROPERLY SEALED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
COMPLETION DATA: PUMP CAPACITY: _____ GPM _____ HP		MAKE OF PUMP:		TYPE OF DROP PIPE: <input type="checkbox"/> PLASTIC <input type="checkbox"/> GALVANIZED		WELL DISINFECTED AFTER SETTING PUMP: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		PUMP SET BY: <input type="checkbox"/> PUMP INSTALLER <input type="checkbox"/> OWNER <input type="checkbox"/> DRILLER		NOT TO BE INSTALLED UNTIL:	
DEPTH FROM LAND SURFACE: FEET TO FEET		FORMATION DESCRIPTION		DIAMETER OF DRILL HOLE		LOCATION OF WELL: SHOW LOCATION IN SECTION PLAT		AREA NO. A-5		COUNTY: St. Louis	
0 10		Top soil dark yellow				NE NE NW SW		ELEVATION: 440		SECTION: 8	
10 60		Coarse sand & gravel				TWN 46 N. RNS 5		CORNER: NW			
						TOTAL DEPTH OF WELL: 60'					
SKETCH EXACT LOCATION OF WELL WITH DISTANCES TO AT LEAST TWO PERMANENT LANDMARKS. ALSO SHOW ABANDONED WELL. FOR MONITORING WELLS LANDMARKS ARE TEMPORARY AND PERMANENT BENCHMARKS.											
IF YIELD WAS TESTED AT DIFFERENT DEPTHS DURING DRILLING, LIST BELOW.											
FEET		GALLONS PER MINUTE									
No pump		No testing done for yield									
I HEREBY CERTIFY THAT THE WELL HEREIN DESCRIBED WAS CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS FOR THE CONSTRUCTION OF WATER SUPPLY WELLS AND/OR MONITORING WELLS.											
SIGNATURE (WELL DRILLER): William W. Worth						SIGNATURE (PUMP INSTALLER):					
DATE: 8-20-90						DATE:					
PERMIT NO (WELL DRILLER): ACCO 87						PERMIT NO (PUMP INSTALLER):					
INFORMATION TO BE SUPPLIED BY OWNER						FOR MONITORING WELLS ONLY					
PROPOSED USE OF WELL: <input type="checkbox"/> DOMESTIC (1 TO 3 CONNECTIONS) <input type="checkbox"/> PUBLIC WATER SUPPLY <input type="checkbox"/> HEAT PUMP <input type="checkbox"/> OTHER (SPECIFY):		<input type="checkbox"/> MULTIPLE FAMILY <input type="checkbox"/> NON-COMMUNITY <input checked="" type="checkbox"/> IRRIGATION <input type="checkbox"/> MONITORING		WELL POINT NUMBER:		WASTE MANAGEMENT (EPA ID-NO):		MEAN SEA LEVEL ELEVATION OF WELL:		SITE TYPE: <input type="checkbox"/> RCRA <input type="checkbox"/> SUPERFUND <input type="checkbox"/> LANDFILL <input type="checkbox"/> OTHER	
SIGNATURE (WELL OWNER):		DATE: 10-15-88									

CLEAN COUR

MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGY AND LAND SURVEY
WATER WELL RECORD

MAIL CANARY COPY TO:
WELL DRILLER'S FUND
PO BOX 250
ST. LOUIS, MISSOURI 63401
ENCLOSE \$15.00 WATER WELL CERTIFICATION FEE WITHIN 60 DAYS AFTER WELL COMPLETION.

DO NOT FILL IN
STATE WELL NO. **A03856-00**
OTHER NO. **AS 8/685**

5171A

CK#2521

APR 11 1988

OWNER	NAME Melvin R. Overy #2	ADDRESS 1700 Teson Rd., Hazelwood, Mo. 63042
DRILLING CONTRACTOR	NAME St. Charles Drilling Co.	ADDRESS 6349 Old Hwy. 94, So., St. Charles, Mo. 63303
LOCATION AND DATE	MILEAGE AND DIRECTION FROM NEAREST TOWN OR HIGHWAY 1 8/10 MI. to Teson Rd.	DATE COMPLETED 3-22-88
PROPOSED USE OF WELL	<input checked="" type="checkbox"/> DOMESTIC <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> AIR CONDITIONING <input type="checkbox"/> TEST WELL (SEALED AFTER ABANDONED) <input type="checkbox"/> BUSINESS ESTABLISHMENT <input type="checkbox"/> FARM <input type="checkbox"/> IRRIGATION <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> OTHER (SPECIFY)	
DRILLING EQUIPMENT	<input checked="" type="checkbox"/> MUD ROTARY <input type="checkbox"/> REVERSE ROTARY <input type="checkbox"/> AIR ROTARY <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER (SPECIFY)	

CASING DETAILS	DEPTH (FT.) 30	DIAM. (IN.) 6.9	WEIGHT/FT. OR SCHEDULE ASTM480	SPACER GUIDES USED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	JOINTS <input type="checkbox"/> THREADED <input checked="" type="checkbox"/> WELDED	DRIVE HOLE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	MATERIAL <input type="checkbox"/> STEEL <input checked="" type="checkbox"/> PLASTIC <input type="checkbox"/> OTHER
	GROUTING DETAILS		MATERIAL USED Drillers Mud		DEPTH OF SEAL TOP: _____ BOTTOM: _____		SACKS OF CEMENT OR BENTONITE USED TOP: _____ BOTTOM: _____

SCREEN DETAILS	MAKE Shop made	LENGTH OPEN TO AQUIFER (FT.) 2'
	SLOT SIZE 2/32"	DIAM (IN.) 6.9
	IF GRAVEL PACKED: _____	DIAMETER OF WELL INCLUDING GRAVEL PACK (IN.) 11 3/4
	GRAVEL SIZE (IN.) FROM (FT.) TO (FT.) 1/16 - 1/4 28 30	

YIELD TEST	<input type="checkbox"/> BAILED <input checked="" type="checkbox"/> COMPRESSED AIR	HOURS 1/2	YIELD (GPM) 50
WATER LEVEL	MEASURE FROM LAND SURFACE - STATIC (FT.) 5	DURING YIELD TEST AFTER _____ HOURS	DEPTH OF COMPLETED WELL IN FEET BELOW GROUND SURFACE N/A

COMPLETION DATA	PUMP CAPACITY AT SETTING 20 GPM	TYPE OF TOP CASING SEAL Pitless Adapter	WELL DISINFECTED AFTER DRILLING <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	AFTER SETTING PUMP <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	IS THERE AN ABANDONED WELL? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	WAS IT PROPERLY SEALED? N/A <input type="checkbox"/> YES <input type="checkbox"/> NO
-----------------	------------------------------------	--	---	---	--	--

DEPTH FROM LAND SURFACE		FORMATION DESCRIPTION	DIAM. OF DRILL HOLE
FEET	TO FEET		
0	5	Clay	11 3/4
5	28	Fine Sand	11 3/4
28	30	Coarse Sand	11 3/4

Encountered bedrock at 30'. Rock in this area produces salt and/or heavy concentrations of sulphur. Customer elected alluvial water supply source.

24 5-12-88

LOCATION OF WELL COUNTY **St. Louis**

(SHOW LOCATION IN SECTION PLAT)

X			

NW x NW x SEC. **28**

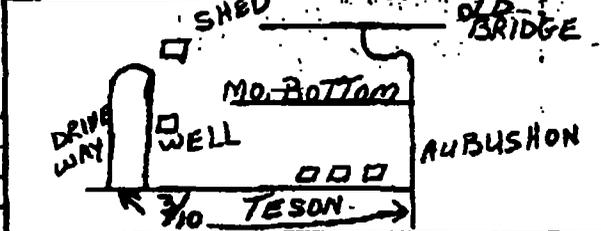
T **47N** N.R. **5E** E

W

TOTAL DEPTH **30**

ELEV. _____

Sketch exact location of well with distances, to at least two permanent landmarks. Also show abandoned well.



IF YIELD WAS TESTED AT DIFFERENT DEPTHS DURING DRILLING, LIST BELOW	
FEET	GALLONS PER MINUTE

I hereby certify that the well herein described was constructed in accordance with Department of Natural Resources requirements for construction of nonpublic water supply wells.

I hereby certify that I directed that the well herein described be constructed in accordance with Department of Natural Resources requirements for nonpublic water supply wells.

SIGNATURE (WELL OWNER) _____ DATE _____

SIGNATURE (WELL DRILLER)
[Signature]

DATE
4-7-88

PERMIT NO.
A00152

130

TOTAL P. 14

Ref. 7478A
 MISSOURI DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF GEOLOGY AND LAND SURVEY
WATER WELL RECORD

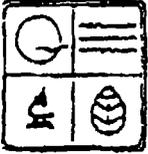
MAIL CANARY COPY TO WELL DRILLER'S FUND
 P.O. BOX 250
 ROLLA, MISSOURI 65401
 ENCLOSE \$15.00 WATER WELL CERTIFICATION FEE WITHIN 90 DAYS AFTER WELL COMPLETION.

REC'D AU 65
 STATE WELL PERMIT NO. A05788
 DATE 1988
 456191

DO NOT FILL IN

OWNER	NAME Sally Dickherber		ADDRESS 24 San Carlos, St. Charles, Mo. 63303				
DRILLING CONTRACTOR	NAME St. Charles Drilling Co.		ADDRESS 6349 Old Hwy. 94 So., St. Charles, Mo. 63303				
LOCATION AND DATE	MILEAGE AND DIRECTION FROM NEAREST TOWN OR HIGHWAY Hwy. 94 to Hwy. 70 to 5th St. to Rio Vista		DATE COMPLETED 8-5-88				
PROPOSED USE OF WELL	<input checked="" type="checkbox"/> DOMESTIC <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> AIR CONDITIONING <input type="checkbox"/> TEST WELL (SEALED AFTER ABANDONED) <input type="checkbox"/> BUSINESS ESTABLISHMENT <input type="checkbox"/> FARM <input type="checkbox"/> IRRIGATION <input type="checkbox"/> OTHER (SPECIFY) <input type="checkbox"/> YES <input type="checkbox"/> NO						
DRILLING EQUIPMENT	<input type="checkbox"/> MUD ROTARY <input type="checkbox"/> REVERSE ROTARY <input checked="" type="checkbox"/> AIR ROTARY <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER (SPECIFY)						
CASING DETAILS	DEPTH (FT.) 80	DIAM. (IN.) 6.9	WEIGHT/FT. OR SCHEDULE ASTM 480	SPACER GUIDES USED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	JOINTS <input type="checkbox"/> THREADED <input checked="" type="checkbox"/> WELDED	DRIVE HOLE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Casing Shoe	MATERIAL <input type="checkbox"/> STEEL <input type="checkbox"/> PLASTIC <input checked="" type="checkbox"/> OTHER PVC
GROUTING DETAILS	TYPE OF SEAL <input checked="" type="checkbox"/> FULL LENGTH <input type="checkbox"/> TOP <input type="checkbox"/> BOTTOM	MATERIAL USED <input type="checkbox"/> NEAT CEMENT <input checked="" type="checkbox"/> CUTTINGS	DEPTH OF SEAL TOP BOTTOM	SACKS OF CEMENT OR BENTONITE USED TOP FULL LENGTH BOTTOM		DRILLING SUSPENDED 72 HRS. AFTER GROUTING <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
SCREEN DETAILS	MAKE		LENGTH OPEN TO AQUIFER (FT.)				
	SLOT SIZE	DIAM (IN.)	IF GRAVEL PACKED:	DIAMETER OF WELL INCLUDING GRAVEL PACK (IN.)	GRAVEL SIZE (IN.) FROM (FT.)	TO (FT.)	
YIELD TEST	<input type="checkbox"/> BAILED <input checked="" type="checkbox"/> COMPRESSED AIR		HOURS 1/2	YIELD (GPM) 10			
WATER LEVEL	MEASURE FROM LAND SURFACE - STATIC (FT.) 85		DURING YIELD TEST AFTER N/A		(FEET) HOURS	DEPTH OF COMPLETED WELL IN FEET BELOW GROUND SURFACE 385	
COMPLETION DATA	PUMP CAPACITY AT SETTING 5 GPM 350 TDM 350 FEET	TYPE OF TOP CASING SEAL Pitless Adapter		WELL DISINFECTED AFTER DRILLING <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		IS THERE AN ABANDONED WELL? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
				AFTER SETTING PUMP <input type="checkbox"/> YES <input type="checkbox"/> NO		WAS IT PROPERLY SEALED? N/A <input type="checkbox"/> YES <input type="checkbox"/> NO	
DEPTH FROM LAND SURFACE		FORMATION DESCRIPTION		DIAM. OF DRILL HOLE		LOCATION OF WELL (SHOW LOCATION IN SECTION PLAT)	
FEET	TO FEET					COUNTY St. Charles	
0	40	Clay		8 5/8			
40	80	Lime		8 5/8			
80	185	Lime		6 1/8			
185	195	Blue Shale		6 1/8			
195	205	Lime		6 1/8			
205	300	Blue Shale		6 1/8			
300	385	Lime		6 1/8		TOTAL DEPTH 385	
Sketch exact location of well with distances, to at least two permanent landmarks. Also show abandoned well.							
IF YIELD WAS TESTED AT DIFFERENT DEPTHS DURING DRILLING, LIST BELOW							
FEET		GALLONS PER MINUTE					
285		2					
380		8					
I hereby certify that I directed that the well herein described be constructed in accordance with Department of Natural Resources requirements for nonpublic water supply wells.							
SIGNATURE (WELL OWNER)				DATE		SIGNATURE (WELL DRILLER)	
						8-11-88	
PERMIT NO. A00152							

9-23-88
jll



MISSOURI DEPARTMENT OF NATURAL RESOURCES
FAX Transmittal Cover Sheet

Date of Fax: 4-26-02

<input type="checkbox"/>	URGENT
<input type="checkbox"/>	Priority
<input type="checkbox"/>	Routine
<input type="checkbox"/>	As Requested
<input type="checkbox"/>	FYI

To: Dana Rosenberg

From: SHARON BEISTEL
DNR/DGLS

FAX: 620-939-9757 Phone: _____

FAX: 573-368-2317 Phone: 573-368-2168

SUBJECT: _____

COMMENTS: list of wells with completion dates
added

RESPONSE EXPECTED: _____

Total # of pages sent (including transmittal sheet): 3

If problems with FAX call: _____

0007476A	W	VETERANS SEPTIC TANK SERVICE	8-12-88	13010 GIST	BRIDGETON	D
0225700A	W	KURTZ/LAFARGE CORP	7-8-99	2115 S RIVER RD	ST CHARLES	D
0007478A	W	8-5-88	DICKHERBER	24 SAN CARLOS	ST CHARLES	D
0054413A	W	10-5-88	KEEVEN	RT. 1, BOX 141	BRIDGETON	I
0100272A	W	CRYSTAL SPRINGS QURY GOLF CLUB	2-11-2000	12183 RICHARD FARM ROAD	MARYLAND H	I
0100251A	W	FRED WEBER INC	11-5-96	PO BOX 2501	MARYLAND H	I
0077004A	W	THIES FARM GREENHOUSE 5-1-92	THIES	4215 N HANLEY RD	ST LOUIS	I
0208382A	W	3-3-99	THOELE	1020 HAWTHORNE	ST CHARLES	D
0251797A	W	NATIONAL CART/UNNERSTALL LLC	7-7-2000	325 BOSCHERT TOWN RD	ST CHARLES	P
0169355A	W	5-10-98	KEEVEN	PO BOX 247	OFALLON	I
0169337A	W	4-18-97	SCHRODER	805 PALM	ST CHARLES	I
0005171A	W	3-22-88	OVERY	1700 TESON ROAD	HAZELWOOD	D
0126120A	W	3-22-95	LANZER	714 MOUNDALE DR.	FERGUSON	D

lbIRptDR2

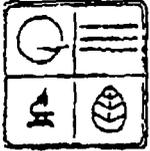
4/26/2002

WELL NUMBER	TYPE	BUSINESS	OWNER	ON ROAD	CF
0181904A	W	8-23-97	COCKS	3945 CHARBONIER	FLORRISSANT

lbIRptDR2

4/26/2002

USE	TOTAL	DEPTH	CD	CD	SEC	THAWING	CASING	FEET
D		70		SE	18	47	6	71
								3
								8



MISSOURI DEPARTMENT OF NATURAL RESOURCES
FAX Transmittal Cover Sheet

Date of Fax: 4-26-22

<input type="checkbox"/>	URGENT
<input type="checkbox"/>	Priority
<input type="checkbox"/>	Routine
<input type="checkbox"/>	As Requested
<input type="checkbox"/>	FYI

To: Dana Rosenberg

From: SHARON BEISTEL
DNR/DGLS

FAX: 636-939-9757 Phone: _____

FAX: 573-368-2317 Phone: 573-368-2168

SUBJECT: _____

COMMENTS: list of water wells in 3-mile radius of
47N5E sec 34 (13570 St Charles Rock Rd)

RESPONSE EXPECTED: _____

Total # of pages sent (including transmittal sheet): 4

If problems with FAX call: _____

RECORD #	TYPE	BUSINESS N	OWNER LAST	OWN ADDR	CITY	USE
0007476A	W	VETERANS SEPTIC TANK SERVICE		13010 GIST	BRIDGETON	D
0225700A	W	KURTZ/LAFARGE CORP		2115 S RIVER RD	ST CHARLES	D
0007478A	W		DICKHERBER	24 SAN CARLOS	ST CHARLES	D
0054413A	W		KEEVEN	RT. 1, BOX 141	BRIDGETON	I
0100272A	W	CRYSTAL SPRINGS QURY GOLF CLUB		12163 RICHARD FARM ROAD	MARYLAND H	I
0100251A	W	FRED WEBER INC		PO BOX 2501	MARYLAND H	I
0077004A	W	THIES FARM GREENHOUSE	THIES	4215 N HANLEY RD	ST LOUIS	I
0208382A	W		THOELE	1020 HAWTHORNE	ST CHARLES	D
0251797A	W	NATIONAL CART/UNNERSTALL LLC		325 BOSCHERT TOWN RD	ST CHARLES	P
0169355A	W		KEEVEN	PO BOX 247	OFALLON	I
0169337A	W		SCHRODER	805 PALM	ST CHARLES	I
0005171A	W		OVERY	1700 TESON ROAD	HAZELWOOD	D
0126120A	W		LANZER	714 MOUNDALE DR.	FERGUSON	D

TOTAL DPT	C.1	C.2	C.3	SEC	TWT	RNG	CASING L	TEST YLD	SWL
245	SE	SE	NE	1	46	5	80	30	25
400	SE	SE	SE	6	46	5	105	6	210
385		NW	NE	6	46	5	80	10	85
60			NW	8	46	5	21	0	0
80	NE	NW	SE	17	46	5	40	1507	18
90				17	46	5	67	535	12
90	SW	SW	SE	18	46	5	82	200	20
40	NW	SW	SW	16	47	5	30	25	22
80	SW	NW	SE	17	47	5	50	500	10
85	SE	NW	SW	17	47	5	85	0	0
0				18	47	5	37	100	0
30		NW	NW	26	47	5	30	50	5
412				35	47	5	109	15	220

tblRptDR2

4/26/2002

REFNUM	TYPE	BUSINESS N	OWNER LAST	TOWN	ADDR	CITY
0181904A	W		COCKS		3945 CHARBONIER	FLORRISSANT

tblRptDR2

4/26/2002

USE	TOTAL	DPTH	Q 1	Q 2	Q 3	SEC	TWN	RNG	GASING	TEST	YLD	SW
D		70			SE	18	47	6	71		3	8